

isc Thyristors

INCHANGE SEMICONDUCTOR

0.85

125

-40 to + 150

°C

10

27

12.5

a

X0402MF

4.7max

FEATURES

- I_{T(RMS)}=4A
- V_{DRM}=600V
- Low Igt<200uA
- 100% avalanche tested
- · Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

SYMBOL VDRM VRRM $I_{T(AV)}$ ITSM $P_{G(AV)}$

Tj

T_{stg}

- Highly s
- For capa in kitche in low po

ABSOLUT

Junction temperature

Storage temperature

TE MAXIMUM RATINGS(T _a =25 [°] C)	KAG 1 cathode 2 anode 3 gate TO-202(3) package		
PARAMETER		MIN	UNIT
Repetitive peak off-state voltage		600	V
Repetitive peak reverse voltage		600	V
On-state current 180° conduction angle		4	A
Non-repetitive surge peak on-state current t= 20ms		30	A
Average gate power dissipation $T_j = 125^{\circ}C$		0.2	W

ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
I _{RRM}	Repetitive peak reverse current	V _{RM} =V _{RRM} , V _{RM} =V _{RRM} , ,Tj=125℃		5 200	μ Α
I _{DRM}	Repetitive peak off-state current	V _{DM} =V _{DRM} , V _{DM} =V _{DRM} ,Tj=125℃		5 200	μA
V _{TM}	On-state voltage	I _{TM} = 8A, tp = 380 μs		1.8	V
I _{GT}	Gate-trigger current	$V_D=12V$, $R_L=140 \Omega$, $R_{GK}=1K \Omega$		200	μA
V _{GT}	Gate-trigger voltage	$V_D=12V$, $R_L=140 \Omega$, $R_{GK}=1K \Omega$		0.8	V
I _H	Holding current	VD=24V, $R_{GK}=1K \Omega$, $I_{TM}=4A$		6	mA

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